Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/971,946	AZPITARTE, JEAN-PATRICK
	Examiner	Art Unit	
	Dohm Chankong	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>*02 August 2005*</u>.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *13 and 15-25* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *13 and 15-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

1>   This action is in response to Applicant's amendment and remarks. Claim 14 has been

cancelled. Claims 13 and 15-25 are presented for further examination.

2>   This is a final rejection.

Response to Arguments

3>   Applicant's arguments with respect to claims 13 and 15-25 have been considered but are

moot in view of the new ground(s) of rejection necessitated by Applicant's amendment.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming
the subject matter which the applicant regards as his invention.

4>   Claims 13 and 15-25 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

   a.   Claim 13 is rejected for lacking proper antecedent basis : "the contract

binding...".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5>   Claims 13 and 15-19 are rejected under 35 U.S.C § 103(a) as being unpatentable over

Spira et al, U.S Patent Publication No. 2003|0172002 ["Spira"].

6>   As to claim 13, Spira is discloses a system for remotely and automatically controlling,

by a facilities management company, maintenance of facilities by a maintenance company

with regards to the contract binding the maintenance company to the facilities management

company [0019, 0111], said system comprising:

local monitoring units, each local monitoring unit being installed in close proximity

to at least one piece of said facilities and associated thereto [0022, 0037, 0041, 0121 : locally

installed modules enable online monitoring], each local monitoring unit comprising:

means for measuring operation parameters of the associated piece of facilities for

detecting an operational state thereof [0231, 0354 : "integrated sensors...collect measurements

continuously"],

means for being connected to a transmission network [0022 : "communication

connection"], and

means for transmitting through said transmission network said detected operational

state of said associated piece of facilities [0121, 0354];

a first and a second computer, each being connected to the local monitoring units

through said transmission network and comprising means for receiving and processing said

detected operational state [0055, 0112]; and

means for storing all information transmitted by the local monitoring units said first

computer being available to the maintenance company and is used to manage the

maintenance of said facilities, and said second computer being available to the facilities

management company and is used to automatically control the maintenance and repair tasks

performed by the technicians of said maintenance company on said facilities with regards to

their contractual obligations [0036, 0055, 0252, 0256, 0258 where : Spira discloses his

Computerized Maintenance Managements system implemented at both the customer system

and the provider center (maintenance company). He further discloses the customer has

substantial control over the operations of the maintenance company through the use of

modules, the substance of the maintenance company's work defined in part by the selection

of the modules as well as the performance requirements of the agreed upon contract].

Spira discloses a control means to track technicians during their maintenance and the

repair tasks performed, said control means being independent from the operational state of

the associated piece of facilities [0258, : "program management module ... provides a focal

point for the information management, improved tracking and reporting of performance..."]

but does not expressly disclose that the means allows a maintenance technician to real-time

notify the start and the end time of his maintenance.

However, Spira further discloses a maintenance protocol for reviewing the quality of

maintenance work including reviewing such performance indicators like maintenance

actions, frequency of work, duration of work and by entering new equipment items [0139].

Thus, because of Spira's disclosure of being able to review maintenance actions and the

duration of work, there is an implied ability to track the start and end time of the work [in

order to be able to determine the work's duration] as well as the repair tasks performed

during the maintenance by the repairman [maintenance actions].

It would have been obvious to one of ordinary skill in the art to implement the ability

to monitor start and end times of a maintenance job along with any repair tasks performed in

Spira. Spira's maintenance review capability and in particular the ability to monitor the

maintenance actions and duration of work provides an obvious motivation to suggest such

functionality would be required and implicit in his embodiments. Furthermore, the ability to

track and monitor a technician's work in Spira's maintenance services would enable both

customer and the maintenance company to evaluate the performance according to the agreed

upon indicators as defined within the contract [0019].

7>   As to claim 15, Spira does not explicitly disclose the system wherein each said local

monitoring unit for preventing the first and second computers from sending information

relating to malfunctions and failures detected between the start and the end of said

inspection and signaled using said control means.

8>   However, the functionality to prevent transmissions of malfunctions during the

inspection is well known in the art for providing the benefit of preventing sending redundant

or false alarms on failures which the technician is there to repair. This functionality is

analogous to a technician taking equipment offline so that appropriate repairs can be made; thus claim 15 is directed towards automating a process that is normally manually performed by a technician during the normal course of his repairs. Therefore, it would have been obvious to one of ordinary skill in the art to incorporate the transmission prevention functionality into Reid's maintenance system to allow technicians to prevent redundant transmissions or even power down network connections so he can properly work and fix the faults. Further, automating a process that was once manually performed involves only routine skill in the art and does not provide patentable distinction over the prior art. *In re Venner*, 120 USPQ 192.

9>   As to claim 16, Spira discloses each of said first and second computers is connected to a database collecting all information relating to the facilities and maintenance thereof, and the information transmitted by said local monitoring units [0124, 0357].

10>   As to claim 17, Spira discloses the system wherein the first and second computers comprise:

means for counting a number of maintenance tasks carried out for each piece of said facilities during a first period of time, for comparing said maintenance task number to a first threshold [0019, 0139 where : Spira clearly indicates reviewing frequency of work and a mutual interest by both parties to evaluate the maintenance operations in comparison with "performance indicators" to determine the effectiveness. Thus it would be obvious to one

ordinary skill in the art to have reasonably inferred that the performance indicators refer to the maintenance tasks described throughout Spira's disclosure];

means for computing a total duration of the maintenance tasks performed on each piece of said facilities during a second period of time, for comparing said total duration to a second threshold [0019, 0139];

means for computing an elapsed time between a time when piece of facilities is detected as malfunctioning and the start time of a repair task on said piece of facilities, for comparing said elapsed time with a third threshold [0019, 0164, 0348 : "time limit which is stipulated"]; and

means for computing a restart time to put a piece of said facilities to a normal operational state after the start time of a repair task on said piece of facilities with a fourth threshold [0019, 0139, 0140, 0258].

Spira does not expressly disclose displaying a fault signal when the items exceed their thresholds. However, such functionality is obvious in light of Spira's disclosure of:

"key performance indicators are generated for each customer to permit both the provider and receiver of the services to evaluate the effectiveness of the provided services" [0019]; and

"Historical data is reviewed, failure analysis is reviewed. A review is made of safety issues, employ statistical techniques to evaluation frequency of work and employ reliability engineering techniques to evaluate design out requirements" [0139].

Spira is clearly motivated to provide a symbiotic relationship between customer manager and maintenance and ensuring the quality of the maintenance operations as defined

by the maintenance contract, illustrated by the performance indicators and monitoring and evaluation of the maintenance work disclosed throughout his specification.

As the display of alarms or "fault signals" when thresholds are met are well known in the art, their implementation into Spira's review and evaluation process of the maintenance operations would be obvious to one of ordinary skill in the art. The fault signals or alarms would be a benefit to customers in aiding the evaluation of the maintenance company's work and ensuring that they meet the performance indicators.

11>   As to claim 18, Spira does not disclose computing penalties if a maintenance fault concerning the exceeding of one of the four thresholds have been detected by second computer. However, as discussed in the previous paragraph, Spira discusses utilizing performance indicators to evaluate effective of the maintenance. Further, Spira discloses that bonus|penalty principles are well known in the art [0005].

Therefore, it would have been obvious to one of ordinary skill in the art to incorporate penalties into Spira's maintenance system to enable customers to enforce the contract agreed upon between the customer and maintenance company; the concept of enforcing a contract and issuing reprimands based on the limitations of the contract are well known in the art.

12>   As to claim 19, Spira discloses the first and second thresholds are set as a function of said facilities [0137], and wherein the third and fourth thresholds are defined as a function of the detected malfunction or type of repair [0137, 0138], the thresholds being defined by the

maintenance contract binding the maintenance company to the managing company [0019 | 0047, 0137].

13>   Claims 20 and 21 are rejected under 35 U.S.C § 103(a) as being unpatentable over Spira, in view of Petite et al, U.S Patent No. 6.437.692 ["Petite"].

14>   As to claim 20, Spira discloses the system according to claim 13, wherein transmissions between the local monitoring units and the first and second computers are carried out through a basic wire or radio telephone network [0022] but does not disclose wherein the local monitoring units further comprises for setting-up a link between the local monitoring units and the first and second computers through a radio telephone network , when the local monitoring units cannot access a basic telephone network.

15>   Petite discloses the local monitoring units further comprises for setting-up a link between the local monitoring units and the first and second computers through a radio telephone network , when the local monitoring units cannot access a basic telephone network [column 11 «line 58» to column 12 «line 3» | claim 11]. It would have been obvious to one of ordinary skill in the art to have incorporated Petite's backup links into Spira. One would have been motivated to perform such an implementation as backup network connections provide backup when primary means of connection fails. Such an method is well known and expected in the art.

16>   As to claim 21, Spira discloses wherein at least one local monitoring unit of a group of

said local monitoring units which are installed close from one another comprises a data

transmission unit, wherein said data transmission unit comprises means for transmission

over the basic telephone network and means for transmission over the radio telephone

network, and wherein other local monitoring unites of the site comprising means for

connection to said data transmission unit [Figure 2 | 0121, 0134, 0143 where Spira's modules

perform the monitoring and communicate with the maintenance company any detected

maintenance information].

17>   Claims 22 and 23 are rejected under 35 U.S.C § 103(a) as being unpatentable over Spira

and Petite, in further view of Johnson et al, U.S Patent No. 6.553.336 ["Johnson"].

18>   Spira does not specifically disclose the radio telephone network transmission means

in the data transmission unit are provided with a backed-up power supply for sending a

power supply fault message when the local monitoring unit is no longer powered.

19>   Johnson discloses a radio telephone network transmission means in the data

transmission unit are provided with a backed-up power supply for sending a power supply

fault message when the local monitoring unit is no longer powered [column 15 «lines 47-53»].

It would have been obvious to one of ordinary skill in the art to incorporate Johnson's power

supply monitoring functionality into Spira's remote monitoring system, and in particular his

monitoring modules (hardware and software) to allow the monitoring unit to keep running if

the primary power supply fails.

20> Spira does not disclose his local monitoring units comprising a means for detecting

internal faults.

21> Johnson discloses local monitoring units comprising means for detecting internal

faults pertaining to operation of said local monitoring unit, and means for sending

malfunction information to a third computer if such internal faults are detected, said third

computer being connected to local monitoring units through said transmission network and

comprising means for receiving and processing and storing into a database the internal

malfunction information transmitted by the local monitoring units [column 15 «line 47» to

column 16 «line 24»].

It would have been obvious to one of ordinary skill in the art to incorporate Johnson's

local monitoring unit detection system into Spira. Such an system would provide a layer of

fault detection not presently found in Spira. The ability for the maintenance company to

monitor the local monitoring units provides a common-sense benefit to detect if any

problems are occurring with their local modules and enable faster repairs.

22> Claims 24-25 are rejected under 35 U.S.C § 103(a) as being unpatentable over Spira, in

view of Whynacht, U.S Patent No. 4.568.909.

23>   As to claim 24, Spira does utilizing a timer [0348] but not the timers as claimed.

24>   Whynacht discloses a system wherein each of said local monitoring units comprises:

means for starting a first timer after a malfunction has been detected on the associated

facility [column 21 «line 56» to column 22 «line 6»];

means for starting a second timer if the first timer has timed out without the

corresponding fault having disappeared [column 22 «lines 46-55»];

means for sending a malfunction message to the first and second computers if the

second timer has timed out without the corresponding fault having disappeared [column 22

«lines 10-15»];

means for starting a third timer after a fault has disappeared [column 24 «lines 55-

66»]; and

means for transmitting a fault disappearance message if the third timer has timed out

without the corresponding fault reoccurring [Figures 14, 15 | column 25 «lines 1-24» where:

Whynacht's "Return to Normal" message is analogous to a fault disappearance message].

It would have been obvious to one of ordinary skill in the art to incorporate

Whynacht's timers into Spira to increase the functionality of Spira's remote monitoring

system. One would have been motivated to perform such an implementation to insure that

the alarm conditions in the system are proper alarm conditions and not false alarms, thereby

minimizing costs of sending out maintenance engineers to the facilities [see Whynacht,

column 22 «lines 46-55» | column 23 «lines 4-6»].

25>   As to claim 25, Spira does not disclose the system wherein a respective duration for

each of the first, second and third timers is determined independently from each other as a

function of each malfunction type.

26>   Whynacht discloses a system wherein a respective duration for each of the first,

second and third timers is determined independently from each other as a function of each

malfunction type [column 21 «line 56» to column 23 «line 27» | column 24 «lines 55-67»]. It

would have been obvious to one of ordinary skill in the art to incorporate Whynacht's

varying timers into Spira to take into account the various malfunctions that may occur in the

monitored devices.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

advisory action. In no event, however, will the statutory period for reply expire later than

SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dohm Chankong whose telephone number is (571)272-3942. The examiner can normally be reached on 8:30AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571)272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dung C. Dinh
Primary Examiner

DC